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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,038	11/16/2001	Kazuhito Gassho	111103	7949

7590 09/22/2005

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EXAMINER

ROBINSON, MYLES D

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/988,038	<b>Applicant(s)</b> GASSHO ET AL.	
	<b>Examiner</b> Myles D. Robinson	<b>Art Unit</b> 2622	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2001.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/18/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

2. The examiner has considered the references listed in the Information Disclosure Statement (IDS) submitted on 11/18/2004 (see attached PTO-1449).

### *Claim Objections*

3. The following quotation of 37 CFR 1.75(a) is the basis of the objection:
  - (a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.
4. **Claims 1 - 10** are objected to under 37 CFR 1.75(a) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

**Claims 1 and 4 – 6** recite the limitation element “a job creation module that creates at least one daughter job... as a mother job” whereas the created job is a mother or daughter job. In the search for prior art, the Office interprets the at least one daughter jobs as copies of a mother job. All claims dependent upon this claim suffer the same deficiency and, therefore, are objected to as well.

Furthermore, **claims 7 – 10** recites the limitation step “creating at least one daughter job... as a mother job” whereas it is uncertain whether the created job is a

mother or daughter job. In the search for prior art, the Office interprets the at least one daughter jobs as copies of a mother job.

Furthermore, **claim 4** recites the limitation "a 'held' status" in line 10 of the claim after the limitation "a 'held' status" was claimed in line 5 of the claim. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to the same, instant "'held' status" or a unique and distinctly different "'held' status" within the claim.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 5 – 10** are rejected under 35 U.S.C. 102(b) as being anticipated by **Hube** (U.S. Patent No. 5,517,316).

Referring to **claim 5**, Hube discloses a job management apparatus that manages statuses of print jobs to be executed by a printing apparatus, said job management apparatus comprising an instruction input module (see Fig. 1, UI 52 and column 5, lines 19 – 30) that inputs a print instruction to a print job, which is excluded from a waiting queue (see Fig. 7, job file 155) of printing operation and is kept in 'held' status, among various input print jobs (column 5, lines 34 – 37 and column 6, lines 29 – 35, 52 – 55), a job creation module that creates at least one daughter job from the print job in the 'held' status as a mother job, in response to the printing instruction (column 7, lines 9 – 22

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and 57 – 62), and a print execution that adds print jobs but at least one of the daughter jobs and the mother job to the waiting queue (column 8, lines 6 – 19).

Referring to **claim 6**, Hube discloses a job management apparatus that manages statuses of print jobs to be executed by a printing apparatus, said job management apparatus comprising an instruction input module (see Fig. 1, UI 52 and column 5, lines 19 – 30) that inputs a print instruction to a print job, which is excluded from a waiting queue (see Fig. 7, job file 155) of printing operation and is kept in 'held' status, among various input print jobs (column 5, lines 34 – 37, column 6, lines 29 – 35 and 52 – 55), a print execution module that executes printing of the print job in response to the printing instruction (column 3, lines 43 – 45, 53 – 61 and column 5, lines 21 – 26), and a job creation module that creates at least one daughter job from the executed print job as a mother job on completion of the print job and keeps the created at least one daughter job in a 'held' status (column 6, lines 43 – 55 and column 8, lines 6 – 19).

Referring to **claims 7 and 8**, respectively, the rationale provided in the rejection of claims 5 and 6, respectively, are incorporated herein. In addition, the apparatus of claims 5 and 6, respectively, perform the method of claims 7 and 8, respectively.

Referring to **claims 9 and 10**, respectively, Hube discloses a recording medium (see Fig. 2, main memory 56) in which a program for managing statuses to be executed by a printing apparatus is recorded in a computer readable manner (column 5, lines 31 – 45), said program causing a computer to attain the functions discussed above in the rejection of claims 7 and 8, respectively. The rationale provided in the rejection of claims 7 and 8, respectively, are incorporated herein. In addition, the program recorded

on the computer readable medium and executed by a computer of claims 9 and 10, respectively, perform the method of claims 7 and 8, respectively.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. ***Claims 1 - 4*** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hube** (U.S. Patent No. 5,517,316) in view of **Suzuki et al.** (U.S. Patent No. 6,213,652 B1).

Referring to **claim 1**, Hube discloses a job management apparatus that manages statuses of print jobs, said job management apparatus comprising an instruction input module (see Fig. 1, UI 52 and column 5, lines 19 – 30) that inputs a print instruction to a print job in 'held' status (column 5, lines 34 – 37 and column 6, lines 52 – 55), a job creation module that creates at least one daughter job (see Fig. 10, offspring jobs A1, A2, A3, ... AN) from the print job in the 'held' status as a mother job (see Fig. 10, parent job A), in response to the printing instruction (column 7, lines 9 – 22 and 57 – 62), and a print execution module that keeps at least one of the mother job and the daughter jobs in the 'held' status and executes printing of at least one of the other print jobs (column 3, lines 43 – 45, 53 – 61, column 6, lines 43 – 55 and column 8, lines 6 – 19) but does not

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explicitly disclose a job management apparatus that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1.

According to International Standard ISO/IEC10175-1, herein after referred to as the standard, defines the 'held' status as a print job that is held in a state that is neither pending printing nor in the process of printing and may be used independently of commands to 'pause' job and 'resume' job (see the standard, p. 116). The user input instructing a 'pause' status of a print job may be removed with another input commanding a 'resume' status of that print job (see the standard, p. 66 – 68).

Suzuki et al. disclose a job management apparatus (see Fig. 1, job processing system 10, column 14, lines 53 – 54, column 15, lines 9 – 13 and column 17, lines 29 – 48) that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1. In Fig. 1, the hold queue 19 conforms to the 'held' status disclosed in the standard (see Fig. 3, steps S109, S110, S111, column 16, line 67 – column 17, line 7 and column 18, lines 16 – 22) and the pause queue 21, which operates independently from the hold queue 19, conforms to the print jobs functioning in response to 'pause' and 'resume' commands (see Fig. 34, pausing section 312e, resuming section 312f, column 17, lines 16 – 21, column 46, line 65 – column 47, line 6, column 47, lines 46 – 60). Although Suzuki et al. does not explicitly disclose conformity with the standard, one of ordinary skill in the art at the time of the invention can ascertain the teachings of Suzuki are functionally equivalent to the teachings of the standard.

Hube and Suzuki are combinable because they are both from the same field of endeavor, being print job management systems invoking a job retention status, whether

temporarily or permanently. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include a print job management system utilizing independently separate print job queues, one designated for print jobs with 'held' status and another designated for jobs with 'pause' status along with a system that manages parent and offspring jobs. The suggestion/motivation for doing so would have been to use interruption and resumption of multi-document print processing to improving efficiency, as suggested by Suzuki et al. (column 4, line 54 – column 5, 40).

Referring to **claim 2**, Hube discloses the apparatus further wherein said print execution module executes printing of at least one of the daughter jobs, while keeping the mother job in the 'held' status (see Fig. 11, steps 206, 210, 216, 218 and Fig. 12, step 228, column 7, lines 57 – 62, and column 8, lines 6 – 19, 26 – 29). The parent job A is considered analogous to the mother job (see Fig. 10) and is considered to be in a 'held' status when stored in a waiting queue (see Fig. 7, job 156 held in job file 155) separate and independent of a printing queue (see Fig. 7, job 156 processing in print queue 165, column 5, lines 34 – 37 and column 6, lines 29 – 35 and 52 – 55).

Referring to **claim 3**, Hube discloses the apparatus further wherein said print execution module executes printing of the mother job, while keeping at least one of the daughter jobs in the 'held' status (see Fig. 11, steps 206, 208, 210, 216, 218, 220, column 7, line 57 – column 8, line 19 and column 8, 26 – 29). The offspring jobs A1, A2, A3, ... AN are considered analogous to the at least one of the daughter jobs (see Fig. 10) and are considered to be in a 'held' status when stored in a waiting queue (see Fig. 7, job 156 held in job file 155) separate and independent of a printing queue (see



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Fig. 7, job 156 processing in print queue 165, column 5, lines 34 – 37 and column 6, lines 29 – 35 and 52 – 55).

Referring to **claim 4**, Hube discloses a job management apparatus that manages statuses of print jobs in conformity with International Standard ISO/IEC10175-1, said job management apparatus comprising an instruction input module (see Fig. 1, UI 52 and column 5, lines 19 – 30) that inputs a print instruction to a print job in 'held' status (column 5, lines 34 – 37 and column 6, lines 52 – 55), a print execution module that executes printing of the print job in response to the printing instruction (column 3, lines 43 – 45, 53 – 61 and column 5, lines 21 – 26), and a job creation module that creates at least one daughter job from the executed print job as a mother job on completion of the print job and keeps the created at least one daughter job in a 'held' status (column 6, lines 43 – 55 and column 8, lines 6 – 19).

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Gauronski *et al.*** (U.S. Patent No. 5,164,842) disclose a job/page proofing for electronic pages with proof jobs copied from print jobs in a separate waiting queue in a hold status.

**Tang *et al.*** (U.S. Patent No. 6,160,629) disclose a multiple copy printer with print job retention.

**Normura et al.** (U.S. Patent No. 5,327,526) disclose a print job control system with a print job manager that sets an order and manipulates the priority of print requests.


**Wanda** (U.S. Patent Application 2002/0030851 A1) discloses an information processing apparatus, distributed printing controlling method, storing medium and program that produces a plurality of child print jobs for a plurality of printers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571) 272-5944. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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